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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,924	02/28/2002	Yoon Kean Wong	035451-0178(3724.Palm)	1157

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EXAMINER	
CHANG, KENT WU	
ART UNIT	PAPER NUMBER
2629	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/085,924	WONG ET AL.	
	Examiner	Art Unit	
	Kent Chang	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 December 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,8,12-14,16-20 and 22-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,8,12-14,16-20 and 22-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/5/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The references listed in the Information Disclosure Statement submitted 12/5/06 have been considered by the examiner (see attached PTO-1449).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 20 and 22-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification has also failed to disclose the claim limitation of claim 20, the last 4 lines *"wherein the first display unit and the second display unit may be interchangably attached to and detached from the processing unit"*. The specification does not teach one teaches one skill in the art how to make or use *the first display unit and the second display unit may be interchangably attached to and detached from the processing unit.*

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 1 recites the limitation "the visual display", "the processing unit" in line 6 and 7, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-4, 8, 12, 14, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramakesavan (US 20030065734A1) in view of Koenig (US 20020021258A1).

In regard to claims 1,14,16, Ramakesavan discloses a display system for a handheld computing device (fig.2 (200) "Laptop"), the display system comprising:

a display unit (see, fig.2 (210), figs.3A, 3B (390), fig.4 (405), "PDA") having a display screen and a communications transceiver ([0023]);

a handheld device (fig.2 (200), figs.3A, 3B (300), fig.4 (400)), having a communications transceiver and sending display data to the transceiver of the visual display ([0023]);

a first power source for the processing unit (fig.4 (435));

and a second power source for the visual display (fig.4 (430)), wherein the visual display is physically separable from the processing unit while displaying information according to communications from the processing unit between the visual display transceiver and the processing unit transceiver (see,[0032],[0034]).

Ramakesavan has failed to teach that the display unit is flexible and expandable. The patent of Koenig is cited to teach that it is well known for a display unit to be flexible and expandable (see, figs. 1-3). Koenig also teaches that the driver controls the display images based on the display size (current expansion of the display screen) ([0032], [0033]). It would have been obvious to one skill in the art to recognize that the display driver of Koenig can update the screen resolution base upon the current expansion of the display screen in order to view continues images.

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to have been motivated to use the flexible and expandable display system of Koenig into the display system of Takahiro, because this will allow the user to display multiple images simultaneously to provide more functionality.

As to claims 2 and 18, Ramakesavan also discloses that the visual display includes and a storage unit (fig.3 (4)) processing unit (CPU) (fig.3 (2)). Ramakesavan did not expressly state that the storage device is a random access memory (RAM). However, it is well known to use a RAM as a storage system.

In respect to claim 3, Ramakesavan disclose that the visual display CPU receives information over the wireless connection from the handheld computing device and stores the information in the visual display memory (see, page 3 of 5 [0012]).

As to claim 4, Ramakesavan also suggests that the information communicated from the processing unit to the visual display includes information necessary to display the current display image and information related to the current display image (see, page 3 of 5 [0012]).

As to claims 8 and 12, it is inherent for Ramakesavan display system to having input capabilities and the communications transceivers send and receive information using a custom wireless communication protocol.

In regard to claim 17, Ramakesavan discloses a processors power source (fig.3 (17)) and display power source (fig.3 (3)), but failed to teach that the display power source is lighter in weight than the processor power source. However, it would have been obvious to one skill in the art to recognize that the display power source has to bee lighter than the processor display because since the display is a portable in order for the user to carry light weight display the power source has to be lighter than the (bas unit) processor.

As to claim 19, Ramakesavan also teaches that the transceiver transmits information related to current display screen information to the display system to store in the display system memory while the current display screen information is being viewed (see, [0008], [0012]).

4. Claims 20,22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramakesavanin view of Lunsford et al (US006614350B1) and Koenig (2002/0021258A1).

In regard to claim 20, Ramakesavanin teaches applicant's claimed invention in the above rejection of claims 1,14,16 except, a second display unit, the second display unit including a second display area, a third processor, a third transceiver coupled to the third processor and configured for communications with the first transceiver, and a third power source coupled to the third processor and also wherein the first display unit and the second display unit may be interchangeably attached to and detached from the processing unit.

Lunsford et al is cited to teach that it is well kwon for a computing system to have a second display unit (fig.3, col.4, lines 50-65,col.5, lines 17-31, a second display ("PDA 40"), a first display ("PDA 20"). It is inherent for the second display unit (40) to have a display, a processor, a power source and a transceiver. Ramakesavaniu teaches that the first display can be attached/detachable from the processor (fig.4 and [0032],[0035]). Thus, Lunsford et al the first display unit and the second display unit may be interchangeably attached to and detached from the processing unit in order for the display units to exchange information with the processing unit.

Therefore, it would have been obvious to one sill in the art at the time of the invention was made to have been motivated to incorporate the second display unit of Lunsford et ai into the first display unit and the processor unit of Ramakesavanin, because this will allow the display unit to exchange more information with the processor and each can monitor each other in a security web system.

Koenig discloses an adjustable display device that is flexible and foldable, thus expandable (see, figs. 1-3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ramakesavanin and Lunsford et al by having the display be flexible and expandable, as in the invention of Koeuig. One would have been motivated to make such a change based on the teaching of Koenig that such foldable, flexible displays have been developed, offering a small size for portability and a large display screen size for use.

In regard to claims 22-24, Ramakesavanin disclose a first display having a power source, but has failed to teach that the second power source is lighter in weight than the third power source, the first display unit is a ruggedized display unit, the first display unit is high resolution display than the second display unit. This is an obvious choice of design. One can pick and chose the weight of the power source or the resolution of the display unit or the rugged it of the display depending upon in ones preference and choice.

Response to Arguments

9. Applicant's arguments filed 12/5/06 have been fully considered but they are not persuasive.

Applicant's arguments, see page 6, filed 12/5/06, with respect to the 112 rejection to the specification for failing to teaches "display drivers capable of updating screen resolution and screen display size based on the current expansion of the display screen" and "the processor is configured with display drivers to update display resolution and screen display size based upon the current expansion state of the flexible and expandable display" have been fully considered and are persuasive. The 112 rejection with respect to the above limitation has been withdrawn.

With respect to applicant's argument to claim 20, as correctly recognized by applicant, the originally filed claim recited the limitation of "wherein the first display unit and the second display unit may be interchangeably used with the processing unit", which is different from the currently pending claim that recites the display units being "interchangeably attached to and detached from the processing unit" with the processing unit. Therefore, the rejection is maintained since the scope of the claims has been changed.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., displaying information on a display unit.**wirelessly received from a handheld device** while the display unit is physically separated from the handheld device as recites in claims 1-4, 8, 12, 14, and 16-19) are not recited in the rejected claim(s), since

the claim merely claiming displaying information according to communications from the handheld device. Note that Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With respect to the 103 rejection of claims 20 and 22-24, note that Lunsford clearly teaches a first and second display that may be interchangeably used for displaying information from the laptop computer (see Fig.3).

The remainder of the pertinent topics for argument are present in the appropriate rejections above.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Chang whose telephone number is 571-272-7667. The examiner can normally be reached on Monday to Thursday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz, can be reached at 571-272-3638.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

571-273-8300

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kent Chang
Primary Examiner
Art Unit 2629

kc

3/5/07